March 22, 1932. P. E. FENTON 1,850,622

CARPET FASTENER

Filed June 9, 1931

Fig. 1.

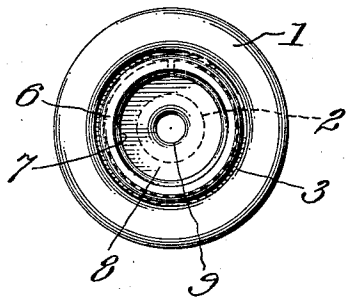


Fig. 2.

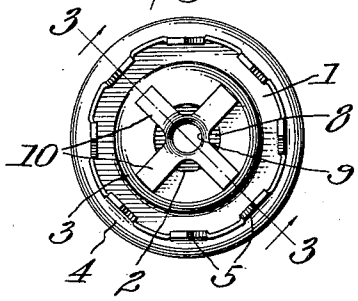


Fig. 3.

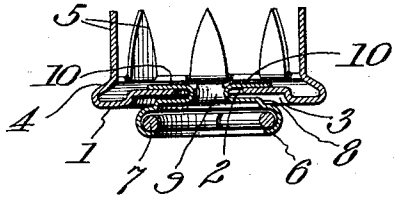


Fig. 5.

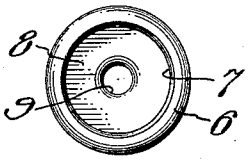
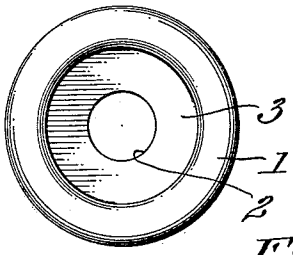


Fig. 4.



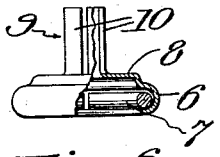


Fig. 7.

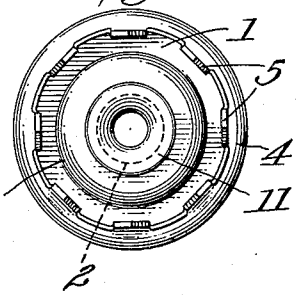


Fig. 8.

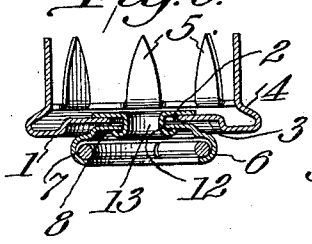


Fig. 6.

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Patented Mar. 22, 1932

1,850,622

UNITED STATES PATENT OFFICE

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CARPET FASTENER

Application filed June 9, 1931. Serial No. 543,197.

The object of this invention is to provide a floating or shifting spring socket as one element of a snap fastener, specially designed for use on carpets or rugs for automobiles in connection with a fixed complemental element.

The invention contemplates, primarily, a three-part socket element, made up of a plate or casing having an oversized opening in which is mounted a holder carrying a spring ring, the holder being assembled with the plate to position the socket for cooperation with a complemental rigidly fixed stud or head, to hold the carpet or rug or other article in detachable position of use, as I will proceed now more particularly to explain and finally claim.

In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a face view; Fig. 2 is a back view, and Fig. 3 is a cross-section on line 3—3 of Fig. 2, illustrating one form of the invention. Fig. 4 is a face view of the plate or casing alone. Fig. 5 is a face view of the spring ring and holder, and Fig. 6 is a partial section and elevation thereof detached. Fig. 7 is a back view illustrating a modified form of the invention. Fig. 8 is a section similar to Fig. 3 illustrating a further modification.

The plate or casing comprises a base 1 having a central oversized opening 2, larger than the aftermentioned shank of the spring holder, and this base is countersunk at 3 around the opening to compensate for or absorb a part of the depth of the said holder. The periphery of the base has an inwardly turned slanting rim 4 from the edge of which project the prongs 5 by which the device is attachable to a carpet, rug or other article on which the device may be useful. The inturning or beveling of the rim 4 conceals the prongs and affords an extended area for contact with the carpet or rug and thereby avoids cutting contact with the carpet or rug.

The holder or socket element comprises a headed flare 6 closed about a spring ring 7 which serves as the active element for engaging the stud or head, not shown, but of any usual or approved form. The flare is enough larger than the spring ring to permit the expansion of the ring as it is engaged with and disengaged from the stud or head, but sufficiently smaller than the said ring to insure the placement of the ring and prevent its dislocation in engaging with the stud or head or being disengaged therefrom. Next to the flare 6 is the well 8 of a depth sufficient to receive that portion of the stud or head which in use projects beyond the spring ring. This well lies within the countersink 3 and thus there is avoided undue projection of the holder beyond the level of the base. A tubular shank 9 projects from the well and, as shown in Figs. 1 to 6 inclusive, this shank is longitudinally slitted to form fingers 10. The shank 9 is of considerably less diameter than the opening 2 in the base so that the holder as a whole is laterally shiftable or capable of floating in the plate or casing to accommodate the socket to variations in the location of the stud or head. The holder is shiftably or floatingly connected with the plate by rolling or spreading its fingers over the inside of the base, as shown in Figs. 2 and 3. Of course sufficient clearance is allowed in thus connecting the holder and plate as not to interfere with the shifting or floating of the holder and yet preserve a secure attachment of the holder to the plate.

The holder is made of a single piece, and it and its spring ring, in connection with the one-piece plate or casing, constitute a three-piece structure, of economical and efficient manufacture.

Instead of slitting the shank 9 of the holder to provide deformable fingers 10 for attaching the holder to the plate or casing, this shank may be rolled outwardly, without slitting, as indicated at 11, Fig. 7, in simulation of an ordinary eyelet.

As shown in Fig. 8 the shank of the holder may be omitted, and an opening 12 formed therein through which an eyelet 13 may be passed and appropriately clinched to assemble the holder and plate or casing in desired floating relation.

Further variations in the details of construction and the arrangement of parts are deemed to be permissible within the prin-

ciple of the invention and the scope of the claims following.

What I claim is:—

1. In a carpet fastener, a plate having prongs to penetrate the carpet and be clinched thereon to permanently and fixedly attach it to such carpet and provided with an oversized opening for the reception of a socket element, said socket element including a resilient stud-engaging means, and means passed through said opening and deformed in said opening to assemble the socket element in laterally shiftable relation to said plate.

2. A carpet fastener, having a plate provided with prongs for fixedly securing it to a carpet or rug and provided with a base having an oversized opening, and a socket element having a beaded flare, a spring ring in said flare, and means engaging the edges of the oversized opening to unite the plate and socket element in a shiftable or floating state.

3. A carpet fastener, having a plate adapted to be secured to a carpet or rug and provided with a base having an oversized opening, and a holder or socket element having a beaded flare, a spring ring in said flare, and a shank on said holder passed through said opening and deformed to unite the plate and socket element in a shiftable or floating state.

4. A carpet fastener, having a plate adapted to be secured to a carpet or rug and provided with a base having an oversized opening, and a socket element having a beaded flare, a spring ring in said flare, and a shank longitudinally slitted to form fingers which are passed through said opening and rolled down to unite the plate and socket element in a shiftable or floating state.

5. A carpet fastener, having a plate adapted to be secured to a carpet or rug and provided with a base having an oversized opening and a countersink surrounding said opening, and a socket element having a beaded flare and a well adjacent to said flare, a spring ring in said flare, and a shank longitudinally slitted to form fingers which are passed through said opening and rolled down to unite the plate and socket element in a shiftable or floating state.

6. A carpet fastener, having a plate provided with attaching prongs and having a central opening, and a holder made with a beaded flare, a superposed well and a longitudinally slitted shank extending from the well, and a spring ring in the beaded flare, the longitudinally slitted shank forming fingers extended through said opening and rolled over or spread upon the plate.

7. A carpet fastener, having a plate provided with prongs to penetrate the carpet or rug and permanently and fixedly secure it to such carpet or rug and provided with a base having an oversized opening, and a socket element provided with resilient stud-engaging means and having a shank passed through said opening and rolled over the edges of said opening to assemble said socket element in the base in floating or shiftable relation thereto.

In testimony whereof I have hereunto set my hand this 8th day of June, A. D. 1931.

PAUL E. FENTON.